

REMARKS

This Response is submitted in reply to the Office Action dated August 1, 2008. Claims 1-4 and 6-26 are pending in the patent application. Claims 4, and 6-10 have been allowed. Claim 5 has been canceled without prejudice or disclaimer.

A Petition for a Three Month Extension of Time is submitted herewith. The Commissioner is hereby authorized to charge deposit account 02-1818 for any fees which are due in connection with this Response and this Petition for a Three Month Extension of Time.

The Office Action rejected Claim 5 under 35 U.S.C. §112, second paragraph as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, the Office Action stated, "In claim 5, it's improper to recite a retaining means that is broader than the independent claim." Applicant respectfully disagrees, nevertheless, to advance prosecution of the present application, Applicant elected to cancel claim 5 without prejudice or disclaimer. Applicant submits that this rejection should be withdrawn.

The Office Action rejected Claims 1-3, 11-13 and 16-18 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 4,162,614 ("Holleyman") in view of U.S. Patent No. 1,993,168 ("Hatchman"). Applicant respectfully disagrees.

Holleyman discloses a piston type power plant operable by a pressure fluid such as natural gas from a well or compressed air. In Holleyman, the power plant includes a pressure tank 28 that is connected to a check valve 36 on one end of the tank and an inlet manifold 38 on another end of the tank.

Hatchman discloses a vaporizing, mixing, and feeding device. The Hatchman device includes a cap 12 which serves as the top closure member for a receptacle 13 which is connected by means of screw threads with the cap.

The Office Action stated that Hollyman does not disclose a cap bracket for retaining or connecting the canister with the manifold. The Office Action concluded that it would have been obvious to modify the canister in Holleyman to have a retaining cap bracket of Hatchman to more effectively retain the canister with the manifold pipe.

Applicant respectfully disagrees and submits that the tank of Hollyman cannot be combined with the threaded retaining cap bracket of Hatchman without destroying the functionality of Hollyman. In Hollyman, tank 28 is in a fixed orientation with respect to the power plant system, where tank 28 is connected to the power plant system via two pipes at two different ends of the tank. If the retaining cap bracket of Hatchman were used on either end of Holleyman's tank 28, the tank 28 could not be connected at both points to the power plant system. That is, connecting Hatchman's threaded retaining cap bracket onto Holleyman's tank 28 would require Holleyman's tank 28 to be rotated to screw Holleyman's tank 28 into the threaded retaining cap bracket. However, because Holleyman's tank 28 must be connected at two different fixed points in the power plant system, Holleyman's tank 28 cannot be screwed into a threaded retaining cap bracket. Accordingly, incorporating the threaded retaining cap bracket of Hatchman with the tank 28 of Hollyman would destroy the functionality of Hollyman.

Applicant also submits that it would not have been obvious to one of ordinary skill in the art to modify Holleyman and Hatchman to result in such a fluid input assembly without reasonably being construed as improper hindsight reconstruction.

For at least the above reasons, it is respectfully submitted that Claim 1 and its dependent claims are each patentably distinguished from Holleyman in view of Hatchman and are in condition for allowance. For similar reasons, it is respectfully submitted that Claims 11 and 16 and their respective dependent claims are each patentably distinguished from Holleyman in view of Hatchman and are in condition for allowance.

The Office Action rejected Claims 1, 3, 11-13 and 16-18 under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 819,653 ("Hawke") in view of Hatchman. Applicant respectfully disagrees.

Hawke discloses a toy vehicle designed for operation by compressed air. In Hawke, a tank 2 for storing compressed air is connected to an engine-cylinder 12 through supply pipe 14. Hawke also discloses that the tank 2 is connected to another supply pipe 39 that enables a pump to deliver a supply of air. Hawke further discloses that tank 2 is connected to other components of the toy vehicle such as bracket arm 31, bracket 37, and axel support arms (illustrated in Fig. 2 of Hawke).

The Office Action stated that Hawke does not disclose a cap bracket for retaining or connecting the canister with the manifold. The Office Action concluded that it would have been obvious to modify the canister in Hawke to have a retaining cap bracket of Hatchman to more effectively retain the canister with the manifold pipe.

Applicant respectfully disagrees and submits that the tank of Hawke cannot be combined with the threaded retaining cap bracket of Hatchman without destroying the functionality of Hawke. In Hawke, tank 2 is fixedly coupled to numerous different devices of the toy vehicle that rely on tank 2 for support. Such connections prevent the tank of Hawke from rotating with respect to any of the connected devices. If the retaining cap bracket of Hatchman were incorporated with the tank 2 of Hawke, the tank must be disconnected from the various devices of the toy vehicle to enable the tank to be rotated to screw into Hatchman's retaining cap bracket. However, if the tank 2 of Hawke was disconnected from the various components of the toy, the toy would simply fall apart. Thus, incorporating the threaded retaining cap bracket of Hatchman with the tank of Hawke would destroy the functionality of the toy vehicle of Hawke.

Applicant also submits that it would not have been obvious to one of ordinary skill in the art to modify Hawke and Hatchman to result in such a fluid input assembly without reasonably being construed as improper hindsight reconstruction.

For at least the above reasons, it is respectfully submitted that Claim 1 and its dependent claims are each patentably distinguished from Hawke in view of Hatchman and are in condition for allowance. For similar reasons, it is respectfully submitted that Claims 11 and 16 and their respective dependent claims are each patentably distinguished from Hawke in view of Hatchman and are in condition for allowance.

The Office Action rejected Claims 21-26 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,159,705 ("Jacoby") in view of Hatchman. Applicant respectfully disagrees.

Jacoby discloses a pneumatic toy projectile launching device including a launching barrel, a reservoir (a balloon) to store air under pressure, a pump inflation member, and flexible conduit joining the pump to the body of the device.

The Office Action stated that Jacoby discloses an air engine comprising a cylinder 15 and a piston 22. However, as previously stated in the Response to Office Action of August 23, 2007

and the Response to Office Action of July 9, 2008, Applicant respectfully submits that Jacoby does not disclose an air engine. Jacoby merely discloses an air-powered cannon and a cannon is patentably different from an engine that includes a cylinder and a piston. For example, in Jacoby, element 15 is disclosed as a hollow barrel for guiding a projectile that leaves the hollow barrel. Applicant submits that an engine cylinder does not guide a projectile from leaving a hollow barrel, thus element 15 in Jacoby does not disclose an engine cylinder. In another example, Jacoby discloses that element 22 is a guided projectile that is discharged from the hollow barrel 15 and projected a distance of about 8 to 10 feet. Applicant submits that if a piston was discharged from an engine cylinder, the engine would not work, thus element 22 in Jacoby does not disclose an engine cylinder.

The Office Action also stated that Jacoby does not disclose a cap bracket for retaining or connecting the canister with the manifold. The Office Action concluded that it would have been obvious to modify the canister in Jacoby to have a retaining cap bracket of Hatchman to more effectively retain the canister with the manifold pipe.

Applicant respectfully disagrees and submits that the balloon (i.e., the canister) of Jacoby cannot be combined with the threaded retaining cap bracket of Hatchman without destroying the functionality of Jacoby. In Jacoby, the air-powered cannon includes a reservoir port 33 that is connected to chamber 47. Jacoby further discloses that the reservoir port 33 enables a mouth 37 of a storage reservoir balloon 38 to wrap around the outside of the reservoir port 33. Moreover, because the storage device in Jacoby is a balloon, the mouth of the balloon 37 must be placed on the outside of the reservoir due to the lack of structure of the mouth and neck of the balloon 37 to create a seal around the reservoir port and retain air. However, if the retaining cap bracket of Hatchman was incorporated with the toy cannon of Jacoby, the balloon could not create a seal with the retaining cap bracket of Hatchman. That is, the mouth and neck of the balloon (i.e., the canister) would be placed within the retaining cap bracket, but because of the flaccid nature of the balloon, the mouth and neck of the balloon would simply dangle inside of the retaining cap bracket without creating a seal to retain any air passed to the balloon for storage.

Applicant further submits that even if the balloon of Jacoby could be fitted with threads, the balloon could not be screwed to the retaining cap bracket. In Jacoby, the balloon is disclosed as an elastomeric material such as rubber. Such elastomeric material has a very high coefficient

of friction and would prevent the balloon from sliding within the threaded retaining cap bracket. Thus, the balloon (i.e., the canister) of Jacoby cannot be combined with the threaded retaining cap bracket of Hatchman.

Applicant also submits that it would not have been obvious to one of ordinary skill in the art to modify Jacoby and Hatchman to result in such a fluid input assembly without reasonably being construed as improper hindsight reconstruction.

For at least these reasons, it is respectfully submitted that Claim 21 and its dependent claims are each patentably distinguished from Jacoby in view of Hatchman and are in condition for allowance.

The Office Action rejected Claims 1-3 and 11-26 under 35 U.S.C. §103(a) as anticipated by U.S. Patent No. 4,614,085 ("Neukomm") in view of U.S. Patent No. 4,329,806 ("Akiyama") and further in view of Hatchman. Applicant respectfully disagrees.

Neukomm discloses a gas powered engine. In Neukomm, the pressurized gas container is connected to a gas supply channel 14. The cartridge 13 containing liquefied gas is screwed and secured to the crankshaft housing 4 by a sleeve 15. In Neukomm, the sleeve 15 fits around the outside of the cartridge 13 (as seen in Fig. 1).

Akiyama discloses a fluid engine for pneumatic toys that includes an engine 12 and a fluid reservoir bottle 20. In Akiyama, the engine 12 is positioned at one end of the fluid reservoir bottle 20. The fluid reservoir bottle 20 includes a hole located at a different end of the fluid reservoir bottle 20 (i.e., the end opposite of engine) that can receive and expel compressed air. In Akiyama, the fluid reservoir bottle 20 delivers compressed air to the engine 12, wherein the fluid reservoir bottle 20 and the engine 12 are connected through a series of tubes and valves. Specifically, the fluid reservoir bottle 20 is connected to valve member 46 (i.e., a fueling port) through a long flexible tube 42. The valve member 46 is connected to the engine 12 through a long flexible tube 48. When the fluid reservoir bottle 20 requires air, a pump 68 can be connected to the valve member 46 to charge the fluid reservoir bottle 20.

The Office Action stated that Neukomm does not disclose (1) air is the working fluid, (2) the air canister is rechargeable in a working position, and (3) the retaining cap bracket. The Office Action relied on Akiyama to disclose a rechargeable air canister. The Office Action

concluded that it would have been obvious to combine Neukomm with Akiyama in order to achieve appropriate work output and because air is a less expensive source of energy and to allow the engine in Neukomm to recharge the air canister during operation. The Office Action also relied on Hatchman to disclose the use of a threaded retaining cap bracket for connecting a canister with an inlet manifold pipe. The Office Action concluded that it would have been obvious to modify Neukomm to include the retaining cap bracket of Hatchman to more effectively retain the canister with the manifold pipe. In other words, the Office Action appears to argue that the gas engine of Neukomm incorporates the threaded retaining cap bracket of Hatchman, wherein the retaining cap bracket receives the rechargeable air canister of Akiyama.

Applicant submits that the retaining cap bracket of Hatchman cannot be combined with the gas engine of Neukomm because Neukomm's engine would not function. That is, the retaining cap bracket of Hatchman can not provide pressurized gas to Neukomm's engine and would prevent the engine of Neukomm from operating. In Neukomm, the engine operates when a pressurized gas is applied to piston 1. However, in Hatchman, the retaining cap bracket connects to a canister 13 that contains a non-pressurized fluid. The retaining cap bracket of Hatchman also includes one air inlet port 31 located on one side of the retaining cap bracket, another air inlet port 24 located at the top of the retaining cap bracket, and an outlet port 29 located on a side of the retaining cap bracket opposite of the inlet port 31. In Hatchman, an external force (i.e., cranking of the engine) creates a suction effect through the outlet port 29 that draws streams of air through air inlet ports 24 and 31, causing the fluid of the connected canister 13 to vaporize. The force of the cranking engine also draws the vaporized fluid through the outlet port 29 of the retaining cap bracket of Hatchman. In other words, the retaining cap bracket of Hatchman does not enable a canister of pressurized gas to provide power to the engine. Rather, the retaining cap bracket of Hatchman provides the contents of a connected canister to an engine if the engine already has a separate source of power. Moreover, even if a canister of pressurized gas could be connected to the retaining cap bracket of Hatchman, the gas would simply escape through the inlet port 31 and the outlet port 29. Thus, the retaining cap bracket of Hatchman cannot be combined with the gas engine of Neukomm because Neukomm's engine would fail to operate.

Applicant also submits that even if the retaining cap bracket of Hatchman could be combined with the engine of Neukomm, the combination of Neukomm in view of Hatchman and Akiyama does not disclose a retaining cap bracket coupled to the intake manifold, the retaining cap bracket including therein an aperture for receiving an external surface of a mouth of a canister, wherein if the mouth is positioned in the aperture of the retaining cap bracket sufficiently far to position the external surface of the mouth interior of the retaining cap bracket, at least the external surface of the mouth and the retaining cap bracket at least temporarily secure the mouth to the intake manifold.

In Akiyama, the coupling between the recharging port (i.e., valve member 46) and the fluid reservoir bottle 20 prevents the fluid reservoir bottle from directly coupling to an engine or an intake manifold. That is, coupling an engine to the rechargeable air canister of Akiyama requires the coupling to occur via port 48 of the recharging port so that the recharging port remain accessible. In other words, if the rechargeable air canister Akiyama were incorporated with the engine resulting from the combination of Neukomm in view of Hatchman, the rechargeable air canister of Akiyama would be coupled to the engine resulting from the combination of Neukomm in view of Hatchman via port 48 of the recharging port 46 of Akiyama so that the recharging port of Akiyama is accessible. Thus, the combination of Neukomm in view of Hatchman and further in view of Akiyama does not disclose or render obvious a retaining cap bracket coupled to the intake manifold, the retaining cap bracket including therein an aperture for receiving the external surface of the mouth of the canister, wherein if the mouth is positioned in the aperture of the retaining cap bracket sufficiently far to position the external surface of the mouth interior of the retaining cap bracket, at least the external surface of the mouth and the retaining cap bracket at least temporarily secure the mouth to the intake manifold as required in Claim 1.

Applicant also submits that it would not have been obvious to one of ordinary skill in the art to modify Neukomm, Akiyama, and Hatchman to result in such a fluid input assembly without reasonably being construed as improper hindsight reconstruction.

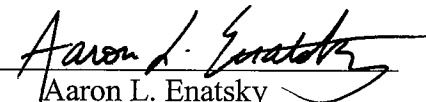
For at least the above reasons, it is respectfully submitted that Claim 1 and its dependent claims are each patentably distinguished from Neukomm in view of Akiyama and further in view of Hatchman and are in condition for allowance. For similar reasons, it is respectfully submitted

that Claims 11, 16, and 21 and their respective dependent claims are each patentably distinguished from Neukomm in view of Akiyama and further in view of Hatchman and are in condition for allowance.

In light of the above, Applicants respectfully submit that Claims 1-4, and 6-26 are patentable over the art of record. Accordingly, Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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